

TECHNICAL REPORT

DEVELOPMENT OF A NATIONAL BIODIVERSITY STRATEGY FOR AFGHANISTAN – FOURTH MISSION REPORT

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BIODIVERSITY SUPPORT PROGRAM FOR NEPA

REPORT ON FOURTH MISSION OF INTERNATIONAL BIODIVERSITY STRATEGY SPECIALIST version of 171209

1. SCOPE OF WORK

The purpose of this assignment is to support the National Environmental Protection Agency (NEPA), Division for Natural Heritage Protection, in formulating a preliminary national biodiversity strategy for Afghanistan. The strategy is to be drafted in a collaborative manner, in compliance with the Environment Law (2008) which requires NEPA to prepare, in consultation with relevant ministries, a National Biodiversity Strategy and Action Plan (NBSAP) that addresses both *in-situ* and *ex-situ* conservation, within two years of entry into force of the Act.

The strategy also is being developed in accordance with the Convention on Biodiversity (signed by Afghanistan in 1992) which states that each contracting party shall 1) develop national strategies for the sustainable use of biodiversity, and 2) integrate the conservation and sustainable use of biological diversity into relevant sectoral and cross-sectoral planning.

Specific deliverables of the assignment are as follows:

- a compilation of available current data or other information about the biodiversity of Afghanistan, organized in a way accessible for NEPA personnel
- a series of training or workshop events that build capacity among NEPA and other relevant partners in biodiversity strategy formulation
- a draft national biodiversity strategy that meets the Environment Law requirements, and has been endorsed by the Director for Natural Heritage Protection, and
- a technical report documenting the process used by NEPA in formulating the strategy.

The work is being carried out under the USAID-funded Biodiversity Support Program for NEPA (BSP/NEPA), with the technical assistance of Ecodit. The International Biodiversity Strategy Specialist assignment comprises four missions to Afghanistan during 2009, with a total of 60 days level of effort. The first mission, aimed primarily at fact-finding, was completed during 18 April-1 May 2009 and is reported in Ecodit 2009a. The second mission, aimed at initiation of the strategy development phase, was carried out during 3-15 July 2009, as reported in Ecodit 2009b. The third mission, comprising stakeholder consultations at provincial level, was carried out during 26 September-16 October 2009 and is reported in Ecodit 2009c. The fourth mission, focusing on drafting of an overarching strategic framework for the conservation of biodiversity in Afghanistan, was carried out during 5-17 December 2009 and is reported herein.

The initial scope of work aimed at the development of an agreed strategic approach to the conservation of Afghanistan's biodiversity by the end of 2009, with follow-up action planning and monitoring being the responsibility of Government, accessing assistance as necessary from a proposed GEF-funded initiative (through UNEP, approval of funding pending) and/or additional funding modalities. However, given that additional funding has not yet materialized, and in order to maintain planning momentum, BSP/NEPA will provide bridging funding to initiate the action plan development process during a fifth mission scheduled for February-March 2010.

Results of the current phase of the **BSP/NEPA** initiative will be the development, by the end of 2009, of an overarching, long-term strategy and broad direction for the conservation and sustainable management of biodiversity in Afghanistan that is consistent with the intent of the Convention on Biodiversity and other international, regional and national standards.

Follow-up development of implementation details (action planning) will then be required to develop the operational methodologies for effective conservation of biodiversity in Afghanistan, including a detailed review of the Convention on Biodiversity, identification of those articles of particular relevance to Afghanistan, and identification and assistance with the development of operational responses as required.

2. ACTIVITIES AND FINDINGS

The fourth BSP mission was carried out by International Biodiversity Specialist Richard E. Salter in close cooperation with National Biodiversity Specialist Sharbat Khan Nikmal, and oversight by NEPA Director Sallari. Activities and planning against the four specified deliverables were as follows:

Deliverable 1: A compilation of available current data or other information about the biodiversity of Afghanistan, organized in a way accessible for NEPA personnel

Investigation of background data was initiated during the first mission and is continuing, through review of available reporting and consultation with relevant technical expertise both in-country and elsewhere. The most comprehensive compilation continues to be UNEP's recently produced (2009) Biodiversity Profile of Afghanistan, which provides up-to-date information on relevant background (importance of biodiversity to Afghanistan; human population; topography, climate and hydrology; biogeography and ecological classification; land cover; ecoregions; wetlands and riparian areas; species, species at risk and endemics; protected areas; agricultural biodiversity), recommended priority actions for conserving Afghanistan's biodiversity, and a comprehensive bibliography of references. Also of primary relevance, the WCS-implemented Program of Work on Protected Areas (PoWPA) is producing species (wildlife and plants) and ecoregional analyses, and the progress and outputs of this program continue to be monitored. Other primary sources of information are described in the First, Second and Third Mission Reports (Ecodit 2009a, 2009b, 2009c).

Deliverable 2: A series of training or workshop events that build capacity among NEPA and other relevant partners in biodiversity strategy formulation

The current capacity of government staff and departments, and of NGOs and relevant international organizations, to develop and implement a biodiversity strategy has been investigated in general terms during the first, second, third and fourth missions through document review and interviews with key informants. The convening by NEPA of a Biodiversity Working Group early in the second mission (see Annex 1 of Second Mission Report) to oversee the strategy development process shifted the immediate training/awareness development focus to this group. Explanatory background materials regarding the CBD and NBSAP formulation were provided during the group's second meeting (see Annex 2 of Second Mission Report). Technical support to this group has continued as necessary by the Team Leader and International and National Biodiversity

Specialists. Other government and project staff have continued to participate in BSP/NEPA's broader training and study tour program.

A draft training needs assessment focusing on developing a broad awareness of the strategy within the relevant government and non-government organizations was prepared during the Fourth Mission (see Annex 5). This requires appropriate follow-up to ensure that training programs and materials are developed and delivered in line with the NBSAP development and implementation. It is proposed that training delivery be based primarily on standard materials regarding NBSAP development (available at the CBD website), translated into Dari as appropriate, and distributed to relevant government agencies and other stakeholders via CD. Selection of these materials is ongoing (see Annex 5 for a preliminary list) as is translation into Dari. UNEP also has offered to share relevant training materials used in the NCSA and NAPA processes, and copies of these have been requested for review.

NEPA's training team will continue to be invited to participate in all stages of planning, in order to ensure their understanding of the NBSAP development process, and subsequent effective training of downstream participants. NEPA's public awareness team will continue to be included in all training and workshops in order to ensure effective communication of the biodiversity strategy and subsequent action plan provisions to all stakeholders.

Deliverable 3: A draft preliminary national biodiversity strategy that meets the Environment Law requirements, and has been endorsed by the Director for Natural Heritage Protection

The primary focus of the Fourth Mission was to draft a strategic framework for the conservation of biodiversity in Afghanistan (see Annex 6). This built on the outputs of the Third Mission (26 September – 16 October) and the intervening period as follows:

The Third Mission Report included a comprehensive listing of ideas and recommendations for the conservation of biodiversity in Afghanistan, based on available publications and reports, and inputs from provincial consultations conducted during 30 September-11 October 2009. Priority biodiversity conservation activities identified in NBSAPs for adjacent countries, but not identified in the reviews and consultations conducted in Afghanistan to date, also were included to ensure that they would be adequately discussed and added if relevant. These were then translated into Dari, and further potential actions identified by members of the Biodiversity Working Group were added. The comprehensive listing of potential actions was then reviewed by the Biodiversity Working Group (see Annex 2) on 15 November 2009, using two scoring systems:

1: Each of the 15 Working Group Members, working individually, was asked to review all of the potential actions identified under each of the major headings (Current Status of Biodiversity in Afghanistan, National Biodiversity Strategy and Action Plan, Protected Areas, Vegetation Management, Community-based Natural Resource Management, Policy and Legal Agreements, Public Awareness, Environmental Education, Capacity Building), and then to select the single most important action under each of the major headings. For purposes of subsequent analysis, the number of "votes" for each action was tallied; the action having the highest number of "votes" as single most important was selected first, followed by the action having the second highest number of votes, and continuing until a total of 8/15 (i.e., more than half of the Group Members having selected the accumulated actions as their first choice) was reached. All

of the selected actions were then included in the next step (Step 2) of the strategy development process.

2: In order to broaden the selection process, and hence to ensure that all of the most important actions were included in the strategy development process, each of the 15 Working Group Members, still working individually, was asked to again assess all of the potential actions identified under each of the major headings, and then to select 1-6 additional actions that they considered to be the most important under each of these headings. The requested number of actions to be selected under each heading was directly related to the total number of actions listed under each (total actions under individual headings varied from 4-28). For purposes of subsequent analysis, the number of "votes" for each action was tallied, and each action receiving votes from 50% or more of the Group Members was selected for inclusion in the next step of the strategy development process (below).

Actions selected under steps 1 and 2 above were then reviewed, similar actions were grouped together, and a **strategic statement** was developed to indicate the **goal and objectives** of each set of **actions**. The strategic statements together comprise the incipient **National Biodiversity Strategy** (pending further review, elaboration and approval), and the disaggregated individual actions (from Step 2 above), the beginnings of an **Action Plan**.

The Biodiversity Working Group also assessed the information on threats to biodiversity gathered during the provincial consultations and from various other sources. This was intended to generate qualitative information that could then be used as a linkage to the next step; identification of management options and recommended actions. The more than 40 threats identified from various sources (see Mission 3 Report) fall naturally into three categories:

- broad-scale natural and human-induced influences (*e.g.*, natural disasters [for example flooding], climate change, overpopulation);
- local-scale pressures on resources (e.g., hunting, fishing, fuelwood collection)' and
- absence of underlying conditions required for effective resource management (e.g., lack of law enforcement, lack of livelihoods options).

The top ten threats identified by the Working Group were insecurity; lack of law enforcement and implementation; lack of education; degradation of rangelands and forests; lack of education and awareness regarding biodiversity and natural resources; poverty, unemployment and hunger; air pollution; conflict and war; illegal cutting of forests; and illegal trade. While these provide an initial focus for planning biodiversity management and protection measures, in order to be effective the NBSAP will need to address all types and levels of threats to biodiversity in Afghanistan, and develop appropriate actions to counter these threats.

Deliverable 4: A technical report documenting the process used by NEPA in formulating the strategy

A technical report will be prepared at the end of the strategy development process, with processes and sources described in sufficient detail to enable correction of any errors or

omissions subsequently discovered in the strategy, and/or to enable rapid and efficient updating at the end of the strategy's lifetime (currently anticipated as 5-10 years).

3. RECOMMENDATIONS

The development of a strategy presupposes that it will be complemented by a follow-on action plan specifying:

- priority actions that need to be taken
- who will take them
- within what institutional arrangements
- within what timeframe
- who are the target audience(s)
- what resources will be required

In order to maintain the planning momentum achieved to date, initiation of action planning should follow strategy development as soon as possible. It is anticipated that the action plan would span a five year timeframe. Much of the information required for action plan development is already at hand, although this needs to be verified and put into the above framework. NEPA will continue to be the primary working contact, but additional consultations will also need to be undertaken with other contacts and partners. How best to structure and schedule these additional consultations remains to be discussed and agreed.

4. REFERENCES CITED

ECODIT 2008. Biodiversity Support Program for NEPA – Capacity Building Needs Assessment. Prepared for USAID/Afghanistan.

ECODIT 2009a. Biodiversity Support Program for NEPA. Report on First Mission of International Biodiversity Strategy Specialist. Prepared for USAID/Afghanistan.

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UNEP 2003. Post-Conflict Environmental Assessment for Afghanistan. United Nations Environment Programme, Nairobi, Kenya.

UNEP. 2009. Biodiversity profile of Afghanistan. An output of the National Capacity Needs Self-Assessment for Global Environmental Management (NCSA) for Afghanistan. United Nations Environment Programme, Post-Conflict and Disaster Management Branch.

ANNEXES:

- Annex 1. List of Acronyms
- Annex 2. List of Biodiversity Working Group Members
- Annex 3. List of Persons Consulted to Date
- Annex 4. Synthesis of Priority Biodiversity Conservation Actions in Afghanistan
- Annex 5. Training Needs Assessment
- Annex 6. Strategic Framework for Biodiversity Conservation in Afghanistan

ANNEX 1: LIST OF ACRONYMS

AWEC Afghanistan Wildlife Executive Committee BSAP Biodiversity Strategy and Action Plan

BSP/NEPA Biodiversity Support Program/National Environmental Protection Agency

CBD Convention on Biodiversity

CD Compact Disk

CITES Convention on Trade in Endangered Species

etc. et cetera

FAO Food and Agriculture Organization of the United Nations

GEF Global Environment Facility

i.e. that is

IUCN International Union for the Conservation of Nature and Natural Resources

MoAI Ministry of Agriculture and Irrigation

MoAIL Ministry of Agriculture, Irrigation and Livestock

NAPA National Adaptation Programme of Action for Climate Change

NBSAP National Biodiversity Strategy and Action Plan

NCSA National Capacity Self-Assessment

NEPA National Environmental Protection Agency

NGOs Non-Governmental Organizations PoWPA Program of Work on Protected Areas

UNCCD United Nations Convention to Combat Desertification

UNEP United Nations Environment Program

USAID United States Agency for International Development

WCS Wildlife Conservation Society
WDPA World Database on Protected Areas

ANNEX 2. LIST OF BIODIVERSITY WORKING GROUP MEMBERS

- Professor Dr. Noor Ahamad Mirazai, Head, Faculty of Science, Kabul University (Chair, Biodiversity Working Group)
- Ghulam Haider Haideri, Head, Environment Section, Natural Resources Management, Ministry of Agriculture, Irrigation and Livestock
- Ghulam Dastageer, General Manager, Rangeland Section, Natural Resources Management, Ministry of Agriculture, Irrigation and Livestock
- Abdul Samai Sakhi, Director of Wildlife, Natural Resources Management, Ministry of Agriculture, Irrigation and Livestock
- Sulaiman Shah Sallari, Director, Natural Heritage Division, National Environmental Protection Agency
- Abdul Baqi Ahmadzai, Provincial Liaison Officer, National Environmental Protection Agency
- M. Akbar Haqbeen, Head of Environmental Quality Objectives, National Environmental Protection Agency
- Wakeel Ahmad Stanekzai, Head, Protected Areas, National Environmental Protection Agency
- Muhibullah Fazli, Wildlife Officer, National Environmental Protection Agency
- Gul Nabi Hamat, Aquatic Officer, National Environmental Protection Agency
- Ghazi Gul Temouri, Terrestrial Officer, National Environmental Protection Agency
- Professor Nesar Ahmad Kohestani, Faculty of Agriculture, Kabul University
- Muhammad Nasir Shalizi, Assistant Professor, Faculty of Agriculture Faculty, Kabul University
- Wafaurahman Wafa, Faculty of Geoscience, Kabul University
- Sharbat Khan Nikmal, Biodiversity and Natural Resources Management Advisor, National Environmental Protection Agency/ECODIT

ANNEX 3. LIST OF PERSONS CONSULTED TO DATE

- Baheer, Dad Mohammad, Deputy Director-General, National Environmental Protection Agency (NEPA), Kabul
- Barikzai, M. Hashim, Director General of Natural Resource Management, Ministry of Agriculture and Irrigation, Kabul
- Bowles, Peter. Deputy Country Director, Wildlife Conservation Society, Kabul.
- Bowling, Belinda, Afghanistan Programme Manager, United Nations Environment Programme, Post-Conflict and Disaster Management Branch, Kabul
- Haqbeen, Mohammad Akbar, Head of Environmental Quality Objectives, National Environmental Protection Agency, Kabul
- Hatch, Charles, ECODIT Senior Environmental Advisor/Team Leader, USAID Biodiversity Support Program for NEPA, Kabul
- Jensen, Catalina, Contract Officer's Technical Representative, Office of Alternative Development and Agriculture, USAID, Kabul
- Johnson, McKenzie, Wildlife Conservation Society, Kabul
- Johnson, Todd, ECODIT Senior Environmental Advisor/Team Leader, USAID Biodiversity Support Program for NEPA, Kabul
- Kanderian, Nina, Wildlife Conservation Society, Kabul
- Larson, David. Chief of Party, Afghanistan Biodiversity Conservation Program/WCS Global Conservation, Kabul.
- Malang, Noorullah, Project Manager, Afghan Conservation Corps, NEPA Kabul Region, Kabul
- Niazi, Shamim-ur-Rehman, National Biodiversity Officer, FAO Afghanistan Country Office, Kabul
- Nikmal, Sharbat Khan, Biodiversity and Natural Resource Management Advisor, USAID Biodiversity Support Program for the NEPA, Kabul
- Sallari, Sulaiman Shah, Director, Division of Natural Heritage Protection, National Environmental Protection Agency, Kabul
- Scanlon, Andrew, United Nations Environment Programme, Kabul
- Shank, C., Wildlife Conservation Society, Kabul.
- Shawe, Keith, Biodiversity Specialist, FAO Afghanistan Country Office, Kabul
- Smallwood, Peter D., Afghanistan Country Director, Wildlife Conservation Society, Kabul
- Stanekzai, Wakil Ahmad, Head of Protected Areas, National Environmental Protection Agency, Kabul

ANNEX 4. SYNTHESIS OF PRIORITY BIODIVERSITY CONSERVATION ACTIONS IN AFGHANISTAN

The following list provides the results of the conservation activities prioritization process described in Section 2 (Deliverable 3).

Activities Selected as Most Important in Step 1: Within each of the main subject headings (Current Status of Biodiversity, National Biodiversity Strategy and Action Plan *etc.*) the 15 Selection Committee members were each asked to select the single most important conservation action that needs to be undertaken in Afghanistan, based on one choice per Committee member under each of the 10 major headings. The activities listed below represent a simple majority choice (but note that two or more actions are listed in the case of ties).

Activities Selected as <u>Important</u> in Step 2: Within each of the main subject headings, the 15 Selection Committee members were again asked to select the most important conservation actions that need to be undertaken in Afghanistan, based on 2-7 choices per member under each of the of the 10 major headings. The requested number of actions to be selected under each heading was directly related to the total number of actions listed under each (total actions under individual headings varied from 4-28). As above the activities listed below represent a simple majority choice.

Other Activities: remaining activities that were not selected as most important or important in Steps 1 or 2 are listed below as they remain of potential use in rounding out the scope of Afghanistan's NBSAP.

1. CURRENT STATUS OF BIODIVERSITY

Most Important Activities

- develop a scientific inventory of flora and fauna
- encourage national and international scholars to develop a comprehensive flora of Afghanistan, drawing particularly on Afghan collections in herbaria in Europe, North America and Russia

Important Activities

- determine the status of Afghanistan's biodiversity
- continue the national red-listing process, assessing conservation status and types and level of threats for Afghan mammals and birds, and incorporating targeted surveys to establish current status of priority species (*note*: the listing process is currently being undertaken by the Afghanistan Wildlife Executive Committee)

Other Potential Activities

- undertake field studies of selected species and ecosystems to better understand biodiversity status and trends
- develop programs to preserve native Afghan land races of crop plants and livestock
- implement local research to determine what species are endangered
- develop biodiversity information systems

2. NATIONAL BIODIVERSITY STRATEGY AND ACTION PLAN

Most Important Activities

 develop a detailed, long-term and complete National Biodiversity Strategy for Afghanistan incorporating biodiversity indicators, targets and specific strategies for implementing elements of the CBD

Important Activities

• involve government and communities in the design, development and implementation of plans for the conservation, protection and use of biodiversity resources

Other Potential Activities

- assign a focal point within the Ministry of Environment and develop expertise and capacity relevant to the CBD
- engage the government more fully in the activities of the CBD and CITES

3. PROTECTED AREAS

Most Important Activities

- develop a protected area system plan for Afghanistan designed to protect representative areas of high biodiversity in all major ecoregions, including transboundary areas
- establish priority and feasible protected areas as legally recognized, adequately funded and effectively managed entities. Candidate priority areas should be Band-i-Amir, Ajar Valley, Pamir-i-Buzung/the entire Wakhan Corridor region, Dashte Nawar and Shah Foladi

Important Activities

- identify biodiversity hotspots and set protection targets
- complete the National Protected Areas System Plan for Afghanistan, articulating clear targets for the protected area system and methods for implementing it
- return ownership of protected areas to government

- develop the National Protected Areas System envisioned in the protected areas legislation
- survey all wetlands and potential protected areas to determine current status and suitability for inclusion into the protected areas system plan
- *explore the possibility of restoring degraded wetlands*
- incorporate findings and recommendations as they are produced by the ongoing POWPA process
- ensure that sufficient attention is paid to mountain areas, the predominant ecosystem in Afghanistan and the likely focus of future ecotourism activities
- promote tourism development
- hire Rangers to protect wildlife/biodiversity resources
- develop ex situ conservation measures (captive breeding, botanical gardens etc.)
- develop conservation measures in urban and other altered ecosystems

4. VEGETATION MANAGEMENT

Most Important Activities

develop plans to manage eastern conifer forests: rebuild community control and
government influence; improve trans-boundary cooperation; introduce a timber
cooperative; control road access to forests; estimate future timber demands; establish
forest management legislation; undertake gradual implementation of export controls;
institute grazing management and rotation systems; develop demonstration sites
showing the viability and benefits of forest conservation; promote strict protection of
forest sites as components of a national protected areas system

Important Activities

- conduct reforestation and tree planting activities, especially in areas where communities are using forest, range and other biological resources sustainably
- develop plans to manage open woodlands: undertake immediate soil stabilization measures; begin community-based reforestation; reinstitute a community-based forest warden system; allocate woodlands to communities; employ grazing management and rotation systems; establish community-based woodlots; establish woodland management legislation; establish seed banks; establish woodland protected areas; develop alternative incomes
- conserve natural forests
- develop national and international gene banks

Other Activities

- give priority to the conservation of riparian vegetation
- prohibit the burning of vegetation cover
- prohibit grazing in areas that are undergoing managed regeneration
- reduce illegal logging, especially large-scale and trans-boundary activities, by enforcing the timber moratorium issued by the central government
- develop effective plans for preserving and recovering remnant pistachio and juniper forests in northern Afghanistan
- develop effective plans to intervene in the destruction of the remaining monsoondependent forests of eastern Afghanistan
- prepare a list of protected medicinal plant species
- introduce appropriate measures to control the harvest of medicinal plants in high risk areas
- *develop/rehabilitate rangelands*
- control trade in medicinal plants

5. COMMUNITY-BASED NATURAL RESOURCE MANAGEMENT

Most Important Activities

 develop and implement community forestry, range management and wildlife initiatives using an approach that integrates agricultural, forestry, range and wildlife uses

Important Activities

• develop innovative ways to undertake biodiversity conservation in concert with poverty alleviation

- develop the capacity of government and communities through the exchange of expertise
- attract international donor assistance for sustainable land management
- understand and utilize traditional practices and knowledge of conservation and sustainable use
- create a policy/strategy framework such as a legal system for allocation of user rights over forests and rangeland to communities
- improve and ensure security
- develop alternative job opportunities

Other Activities

- initiate decentralized, community-based management of natural resources
- implement projects on a pilot-scale that encourage a community-based approach to NRM, the experiences of which should feed into policy and regulatory activities at the central level
- support the development and implementation of sustainable agricultural practices including the use of local varieties
- emphasize tourism development and wildlife products, natural landscapes and features, biodiversity and wildlife heritage in community wildlife management
- develop a strategic approach to implementing a national programme of community-based conservation that fully incorporates traditional knowledge and practices
- pilot and implement community-based natural resource management approaches to rangelands and forests
- *support labour-based rehabilitation projects*
- achieve a balance between maximizing production and productivity in land uses (farming, forestry, wildlife exploitation) and maintenance and enhancement of the resource bases
- maximize benefits from nature tourism
- control human population growth including numbers of returnees
- provide land tenure/security of use to local people
- ensure sustainable use of all resources
- provide regulated access to firewood
- design and develop projects to address threats (e.g., dams and water storage (for irrigation), solar and wind power, fishing, tree planting, other livelihoods
- encourage international investments in irrigation and environmental projects
- *improve livestock husbandry*
- encourage conservation through People's Councils/conservation committees
- integrate traditional knowledge into management policies
- develop and implement flood protection measures (tree planting, protective bunds)

6. DESERTIFICATION

Most Important Activities

prepare and implement a national program concerning desertification and its prevention

Important Activities

- create a suitable mechanism among the relevant government and non-government organizations to implement Afghanistan's obligations under the Convention to Combat Desertification
- stabilize sand dunes and soils; reseed highly degraded rangeland; reduce grazing and dry land cultivation in vulnerable areas; map areas vulnerable to desertification; and establish representative rangeland areas where grazing is excluded or experimentally controlled

Other Activities

- establish an information system to monitor and help implement programs which address desertification and land degradation issues
- establish community-based organizations for planning and decision-making concerning local strategies for combating desertification, including community-based rangeland assessment and management plans

7. POLICY AND LEGAL INSTRUMENTS

Most Important Activities

• develop adequate legal instruments such as laws, regulations, policies and procedures to regulate and address the challenges of biodiversity conservation

Important Activities

- establish procedures for countering the influence of elites/powerful people regarding unauthorized forest cutting and land seizures
- establish a special court to deal with environmental violations
- develop incentives for effective biodiversity conservation (e.g., at provincial and community levels, among user groups etc.)
- draft regulations and rules to implement existing laws, and identify and draft new environmental legislation including both wildlife conservation and hunting regulations.)

- complete drafting and passage of key environmental legislation such as the Protected Area Regulations, the Fauna Conservation and Hunting Regulations, the Rangeland Law and the Forest Law
- develop a National Environmental Action Plan
- set up a functioning system to administer CITES permitting
- strengthen regional and international cooperation
- establish law enforcement, including banning of hunting and regulation of fishing, procedures for fines and penalties, and punishment of violators
- determine and implement protective measures required, including but not limited to endangered species
- regulate trade in forest products
- regulate fishing through licensing
- consider economic value of species in prioritizing protective measures
- develop environmental impact procedures specifically addressing impacts of various types of infrastructure development s and land uses on biodiversity

8. CAPACITY BUILDING

Most Important Activities

• provide support to NEPA regarding budget and personnel, authority to implement policies, and cooperation with regard to implementation of the environment law

Important Activities

- clarify responsibilities in the environmental arena and strengthen the capacity of NEPA
- build environment and natural resource use capacities within line ministries
- continue to develop the human and institutional capacities of MoAIL and NEPA, as well as other institutions having cross-cutting connections, at the national and subnational levels
- develop and implement a legal and regulatory framework that ensures sustainable use of natural resources

Other Activities

- provide basic infrastructure and professional training
- improve the capacity of government institutions to effectively manage biodiversity
- establish inter-agency technical committees and introduce an inter-ministerial coordination mechanism
- provide support and funding for the implementation of programs and projects
- establish an inter-ministerial EIA task force, establish a dedicated EIA Unit, and build professional expertise to undertake EIAs
- develop best environmental practice in the private sector
- strengthen the focal point for Multilateral Environmental Agreements, implement existing agreements, and prioritize participation in other international environmental conventions
- mainstream environmental issues in all institutions
- develop enforcement capacity within NEPA
- develop cooperative mechanisms between NEPA and other government agencies, NGOs and security organizations regarding protection of forests and rangelands
- encourage international investments in capacity development

9. ENVIRONMENTAL EDUCATION

Most Important Activities

• develop an environmental education curriculum and teacher training

Important Activities

• support development of environmental science programs in educational institutions

- establish a resource centre for environmental information and best practice
- increase media awareness
- inventory traditional ecological knowledge

10. PUBLIC AWARENESS

Most Important Activities

• develop a national programme of biodiversity education and awareness

Important Activities

- increase public awareness of biodiversity and its value to the Afghan people
- promote public awareness through schools, mosques and media

- enhance public awareness about biodiversity and sustainable use, including government processes
- prepare and distribute handouts, posters and other materials
- use different media (especially radio) to promote public awareness
- use volunteer groups to deliver awareness and education programming
- organize workshops
- promote public participation in resource management

ANNEX 5. TRAINING NEEDS ASSESSMENT

Who needs to be trained?

Implementation of the NBSAP will rest with NEPA working from central and provincial offices. All relevant management and technical personnel at central level (estimated as 5-10 persons representing Natural Heritage and Protection Division; Division of Environmental Management and Sustainable Development; Division of Research, Policy and Information; Division of International Environmental Affairs; and Division of Implementation and Enforcement) and one or more persons from each Provincial NEPA Office (total 34) needs "awareness" training regarding the content of the NBSAP, and follow-up training regarding implementation and monitoring. The minimum number of persons requiring training within NEPA is therefore 40-45, with the maximum number being limited only by the current numbers of NEPA staff at national and provincial levels.

Apart from NEPA, MoAIL is the primary line ministry responsible for implementation of future Action Plan activities, either through their existing programming or specific activities designed to comply with the NBSAP goals and objectives. MoAIL personnel will also require appropriate awareness training.

What skills are required?

Both management skills (personnel and program management) and technical skills (focusing on biodiversity resources in the broadest sense, across a spectrum ranging from sustainable use to protection of both agricultural and wild species and ecosystems) are required.

What is the existing capacity in relation to skills required?

According to a recent assessment based on group and individual interviews and a written survey (ECODIT 2008) the current capacity of NEPA staff is highly variable, but in general there is a need for improved skills in all areas (ECODIT 2008). The Natural Heritage Division, which is responsible for protected areas and wildlife management (including both aquatic and terrestrial environments), and is the institutional "home" for the NBSAP, has a general need for field equipment and computers, for female staff to interact with female community members, and for increased coordination with provincial staff.

How can the necessary capacity be developed?

Training arrangements specifically with regard to the NBSAP are potentially complicated and expensive. An initial option might be to develop a simple "awareness package" in Dari and distribute this via CD to all relevant NEPA staff. This would also be useful for communication of the NBSAP content to other agencies. Subsequent needs for implementation training remain to be determined.

The aims of the NBSAP should also be reflected in any general public awareness programming developed/delivered by BSP/NEPA. This will effectively broaden the "audience" for the NBSAP and provide a stronger basis for its implementation. While a specific public awareness campaign regarding the NBSAP might be most effective, the potential for linking promotion of the NBSAP with other NEPA initiatives also needs to be investigated.

ANNEX 6. DRAFT STRATEGIC FRAMEWORK FOR BIODIVERSITY CONSERVATION IN AFGHANISTAN

CBD Goals/Strategic Response	Priority Biodiversity Conservation Actions in Afghanistan
Goal 1: Promote the conservation of the biological diversity of ecosystems, habitats and biomes Strategy 1.1: to continue ongoing assessments of Afghanistan's floral and faunal communities, consistent with actions 1 and 2 (opposite), with the overall aim of improving understanding of Afghanistan's biodiversity resources and their conservation requirements Strategy 1.2: to expand the protected areas system to ensure that it is representative of all major ecosystems and areas of outstanding conservation or natural heritage value Strategy 1.3: to develop and implement the support mechanisms (incentives, rules, regulations, environmental education, public awareness) necessary for the effective conservation of biodiversity and other natural	Most Important develop a scientific inventory of flora and fauna encourage national and international scholars to develop a comprehensive flora of Afghanistan, drawing particularly on Afghan collections in herbaria in Europe, North America and Russia develop a protected area system plan for Afghanistan designed to protect representative areas of high biodiversity in all major ecoregions, including transboundary areas establish priority and feasible protected areas as legally recognized, adequately funded and effectively managed entities. Candidate priority areas should be Bandi-Amir, Ajar Valley, Pamir-i-Buzung/the entire Wakhan Corridor region, Dashte Nawar and Shah Foladi develop adequate legal instruments including laws, regulations, policies and procedures to regulate and address the challenges of biodiversity conservation develop an environmental education curriculum and teacher training develop a national programme of biodiversity education and awareness Important complete the National Protected Areas System Plan for Afghanistan, articulating clear targets for the protected area system and methods for implementing it return ownership of protected areas to government
resources	 draft regulations and rules to implement existing laws, and identify and draft new environmental legislation including both wildlife conservation and hunting regulations. develop incentives for effective biodiversity conservation (e.g., at provincial and community levels, among user groups etc.)

CRD Goals/Strategic Response	Priority Riodiversity Conservation Actions in Afghanistan
CBD Goals/Strategic Response	 support development of environmental science programs in educational institutions increase public awareness of biodiversity and its value to the Afghan people promote public awareness through schools, mosques and media Other establish a resource centre for environmental information and best practice, enhance public awareness about biodiversity and sustainable use (including government processes), and increase media awareness inventory traditional ecological knowledge; prepare and distribute handouts, posters and other materials; use different media (especially radio) to promote public awareness; use volunteer groups to deliver awareness and education programming; organize workshops and promote public participation in resource management complete drafting and passage of key environmental legislation such as the Protected Area Regulations, the Fauna Conservation and Hunting Regulations, the Rangeland Law and the Forest Law develop the National Protected Areas System envisioned in the protected areas legislation: survey all wetlands and potential protected areas to determine current status and suitability for inclusion into the protected areas system plan; ensure that sufficient attention is paid to mountain areas (the predominant ecosystem in Afghanistan and the likely focus of future ecotourism activities); and incorporate findings and recommendations as they are produced by the ongoing POWPA (Program
Goal 2: Promote the conservation of	of Work on Protected Areas) process Most Important
species diversity	determine the status of Afghanistan's biodiversity
Strategy 2.1: to continue ongoing assessments of the status of Afghanistan's floral and faunal species, consistent with actions 1 and 2, with the overall aim of improving understanding of Afghanistan's	 identify biodiversity hotspots and set protection targets continue the national red-listing process, assessing conservation status and types and level of threats for Afghan mammals and birds, and incorporating targeted surveys to establish current status of priority species (note: the listing process is currently being undertaken by the Afghanistan Wildlife Executive Committee)

Priority Biodiversity Conservation Actions in Afghanistan
Important
 undertake field studies of selected species and ecosystems to better understand biodiversity status and trends
develop biodiversity information systems
implement local research to determine what species are endangered
Other
hire Rangers to protect wildlife/biodiversity resources
 develop ex situ conservation measures (captive breeding, botanical gardens etc.)
 develop conservation measures in urban and other altered ecosystems
Most Important
develop programs to preserve native Afghan land races of crop plants and livestock
Important
 assess trends in abundance and distribution of wild biodiversity species used for food, medicine, or other consumptive purposes
assess trends in abundance and distribution of harvested species of trees
Other
 assess trends in genetic diversity of domesticated animals, cultivated plants and fish species that are of major socioeconomic importance
Most Important
 develop and implement community forestry, range management and wildlife initiatives using an approach that integrates agricultural, forestry, range and wildlife
uses
 understand and utilize traditional practices and knowledge of conservation and
sustainable use
 develop innovative ways to undertake biodiversity conservation in concert with
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CBD Goals/Strategic Response	Priority Biodiversity Conservation Actions in Afghanistan
CDD COMMING THOUGHT	poverty alleviation
	 Important attract international donor assistance for sustainable land management develop the capacity of government and communities through the exchange of expertise create a policy/strategy framework such as a legal system for allocation of user rights over forests and rangeland to communities improve and ensure security
	 Other develop a strategic approach to implementing a national programme of community-based conservation that fully incorporates traditional knowledge and practices encourage conservation through People's Councils/conservation committees, and integrate traditional knowledge into management policies support the development and implementation of sustainable agricultural practices including the use of local varieties promote tourism development, including nature tourism, emphasizing wildlife and natural landscapes design and develop initiatives to address threats (e.g., dams and water storage (for irrigation), solar and wind power, fishing, tree planting, other livelihoods develop and implement flood protection measures (tree planting, protective bunds) develop EIA (Environmental Impact Assessment) capacity and procedures specifically addressing impacts of various types of infrastructure developments and land uses on biodiversity, and develop best environmental practice in the private sector establish law enforcement, including regulation of hunting, fishing and access to firewood and other forest products, and procedures for fines and penalties

CBD Goals/Strategic Response	Priority Biodiversity Conservation Actions in Afghanistan
Goal 5: Reduce pressures from habitat loss, land use change and degradation, and unsustainable water use	Most Important • reduce illegal logging, especially large-scale and trans-boundary activities, by enforcing the timber moratorium issued by the central government
Strategy 5.1: to prevent the illegal or unsustainable use of biodiversity resources	 Important prohibit grazing in areas that are undergoing managed regeneration explore the possibility of restoring degraded wetlands
	 Other prohibit the burning of vegetation cover develop effective plans for preserving and recovering remnant pistachio and juniper forests in northern Afghanistan, and monsoon-dependent forests in eastern Afghanistan
Goal 6: Control threats from invasive	Most Important
alien species	assess the pathways for introduction of invasive alien species and how these can be controlled
Strategy 6.1: to develop and implement mechanisms for preventing damage to natural	develop management plans for invasive alien species
ecosystems from invasive alien species	Important
	 assess regional and international experience in managing invasive alien species and its applicability to Afghanistan
	Other • assess the status, biological and economic importance of invasive alien species in Afghanistan
Goal 7: Address changes to biodiversity from climate change and pollution Strategy 7.1: to control impacts on biodiversity resources resulting from climate	 Most Important prepare and implement a national program concerning climate change adaptation, focussing on impacts of glacial retreat, temperature increase, more frequent droughts and possibly more frequent floods

CBD Goals/Strategic Response	Priority Biodiversity Conservation Actions in Afghanistan
CBD Goals/Strategic Response change, desertification and pollution	Priority Biodiversity Conservation Actions in Afghanistan prepare and implement a national program concerning desertification and its prevention establish an information system to monitor and help implement programs which address climate change, desertification and land degradation issues Important expand the protected area network, and promote an ecosystem-based approach to biodiversity conservation as an integral part of a climate change adaptation and mitigation strategy make biodiversity and ecosystem management key components in development projects, climate mitigation, adaptation and risk management design and build biodiversity-friendly and climate-resilient infrastructure create suitable mechanisms among the relevant government and non-government organizations to implement Afghanistan's obligations under the Climate Change Convention and the Convention to Combat Desertification stabilize sand dunes and soils; reseed highly degraded rangeland; reduce grazing and dry land cultivation in vulnerable areas; map areas vulnerable to desertification; and establish representative rangeland areas where grazing is excluded or experimentally controlled establish community-based organizations for planning and decision-making concerning local strategies for adapting to climate change and combating desertification, including community-based rangeland assessment and management plans assess the impacts of pollution on water quality in natural aquatic ecosystems
	Other
	• none identified

CDD C - 1-/C44	Deinite Die Bereite Communitier Aufern in Afrikanischen
CBD Goals/Strategic Response	Priority Biodiversity Conservation Actions in Afghanistan
Goal 8: Maintain capacity of ecosystems	Most Important
to deliver goods and services and	• develop plans to manage eastern conifer forests: rebuild community control and
to support livelihoods	government influence; improve trans-boundary cooperation; introduce a timber cooperative; control road access to forests; estimate future timber demands; establish
Strategy 8.1: to develop and implement	forest management legislation; undertake gradual implementation of export controls;
mechanisms and plans for maintaining goods	institute grazing management and rotation systems; develop demonstration sites
and services obtained from critical	showing the viability and benefits of forest conservation; promote strict protection of
ecosystems, focussing on forests and	forest sites as components of a national protected areas system
woodlands	forest sites as components of a national protected areas system
	Important
	• develop plans to manage open woodlands: undertake immediate soil stabilization
	measures; begin community-based reforestation; reinstitute a community-based forest
	warden system; allocate woodlands to communities; employ grazing management and
	rotation systems; establish community-based woodlots; establish woodland
	management legislation; establish seed banks; establish woodland protected areas;
	develop alternative incomes
	 conduct reforestation and tree planting activities, especially in areas where
	communities are using forest, range and other biological resources sustainably
	conserve natural forests
	 develop national and international gene banks
	Other
	give priority to the conservation of riparian vegetation
	prepare a list of protected medicinal plant species
	 introduce appropriate measures to control the harvest of medicinal plants in high risk
	areas
	develop/rehabilitate rangelands
	control trade in medicinal plants

CBD Goals/Strategic Response	Priority Biodiversity Conservation Actions in Afghanistan
Goal 9: Maintain socio-cultural diversity of indigenous and local communities	Most Important develop a profile of traditional knowledge, innovations and practices regarding use of biodiversity resources in Afghanistan
Strategy 9.1: to maintain cultural diversity by recognizing and valuing traditional knowledge and land uses	 Important identify and implement mechanisms for ensuring rights of indigenous and local communities over their traditional knowledge, practices and benefits sharing
	Other • develop a profile of socio-cultural and linguistic diversity in Afghanistan
Goal 10: Ensure the fair and equitable	Most Important
sharing of benefits arising out of the use of genetic resources	 develop and implement a legal and regulatory framework that ensures sustainable use of natural resources
Strategy 10.1: to manage genetic resources for the benefit of all citizens of Afghanistan	 Important establish procedures for countering the influence of elites/powerful people regarding unauthorized forest cutting and land seizures establish a special court to deal with environmental violations assess needs for ensuring that benefits of natural resources exported from Afghanistan are shared in a fair and equitable way
	Other • none identified
Goal 11: Parties have improved financial,	Most Important
human, scientific, technical and	develop a detailed, long-term and complete National Biodiversity Strategy for
technological capacity to implement the Convention	Afghanistan incorporating biodiversity indicators, targets and specific strategies for implementing elements of the CBD
Strategy 11.1: to ensure that NEPA and MAIL have sufficient capacity and resources	 provide support to NEPA regarding budget and personnel, authority to implement policies, and cooperation with regard to implementation of the environment law

CBD Goals/Strategic Response	Priority Biodiversity Conservation Actions in Afghanistan
to carry out Afghanistan's obligations as a signatory to CBD and other MEAs	comply with all CBD requirements for national reporting
	Important
	 clarify responsibilities in the environmental arena and strengthen the capacity of NEPA
	 build environment and natural resource use capacities within line ministries
	 continue to develop the human and institutional capacities of MAIL and NEPA, as well as other institutions having cross-cutting connections, at the national and sub-national levels
	Other
	 provide basic infrastructure and professional training to improve the capacity of government institutions to effectively manage biodiversity establish inter-agency technical committees and introduce an inter-ministerial coordination mechanism, and mainstream environmental issues in all institutions strengthen the focal point for Multilateral Environmental Agreements, implement existing agreements, and prioritize participation in other international environmental conventions
	 develop enforcement capacity within NEPA, including development of cooperative mechanisms between NEPA and other government agencies, NGOs and security organizations regarding protection of forests and rangelands
	 develop support and funding for the implementation of programs and projects, and encourage international investments in capacity development
	 assign a focal point and develop expertise and capacity relevant to the CBD, engage the government more fully in the activities of the CBD and CITES (Convention on
	International Trade in Endangered Species), and set up a functioning system to administer CITES permitting
	strengthen regional and international cooperation